PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)
ITL.0663US (P12629)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR	Application Number	Filed
	10/039,789	January 2, 2002
on _____ 7/24/06	First Named Inventor	
Signature	David K. Poulsen et al.	
Typed or printed name Stephanie Petreas	Art Unit 2192	Examiner Michael J. Yigdall

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☑ attorney or agent of record.
Registration number _____ 42,117 _____

☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

_____
Signature

Mark J. Rozman
Typed or printed name

512-418-9944
Telephone number

7/24/06
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☑ *Total of ____2____ forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: DAVID K. POULSEN, ET AL.	§	Group Art Unit:	2192
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	§		
Serial No.: 10/039,789	§		
	§	Examiner:	Michael J. Yigdall
Filed: January 2, 2002	§		
	§		
For: PROVIDING PARALLEL	§	Atty. Dkt. No.:	ITL.0663US (P12629)
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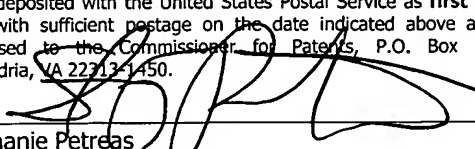Alexandria, VA 22313-1450

REASONS FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Applicants seek pre-appeal review of the rejections of claims 1, 3, 6-8, 10-15, 18, 20, 21, 23 and 26 under 35 U.S.C. §103(a) over U.S. Patent No. 5,812,852 (Poulsen) in view of U.S. Patent No. 5,937,194 (Sundaresan). Applicants further seek review of the rejection of claims 22, 24 and 25 under §103(a) over Poulsen in view of Sundaresan in further view of U.S. Patent No. 6,212,617 (Hardwick). It is respectfully submitted that the rejections to all pending claims are clearly erroneous and the burden of an appeal should be avoided.

With regard to claim 1, neither reference teaches or suggests translating a first program unit into two different other program units in the manner recited by claim 1. That is, claim 1 recites translating a first program unit into a second program unit and also translating that same first program unit into a third program unit, where the second and third program units are to perform different recited functions.

The impropriety of the Examiner's rejection is clear. Simple reference to FIG. 1 of the primary reference, Poulsen, indicates the fallacy of the Examiner's rejection. Specifically, the

Examiner contends that Poulsen teaches translation of a single program unit into two different program units. If this is so, where does the block diagram of FIG. 1 of Poulsen (indicated to be the "overall structure of the present invention") anywhere show two such translations? It does not. Instead, Poulsen simply teaches a single translation, namely translation of a parallel computer program 100 and its translation by translation means 120 into a second parallel computer program 130. Plainly, there is no third program unit that is generated based on another translation of the first computer program 100. Thus, the Examiner's reliance on Poulsen for teaching translation of a first program unit into multiple different program units is clearly erroneous.

Instead, the program units contended to be the translated units in Poulsen are: (1) "library calls (i.e., "a second program unit"); and (2) privatizable storage object declarations (i.e., "a third program unit")." Final Office Action, p. 2.

As to the contented library calls, all that Poulsen teaches is that such library calls are used to initialize various structures. Poulsen, col. 9, lns. 2-19. That is, Poulsen nowhere teaches or suggests that such library calls can be instructions to partition a reduction operation between multiple threads. Nor do the library calls reference a third program unit, where the third program unit is also translated from the first program unit.

With regard to the contended third program unit, i.e., privatizable storage object declarations, these program statements are just that, declarations of storage objects, and are not an encapsulation of a reduction operation (as conceded by the Examiner). Nor do such declarations of Poulsen anywhere teach or suggest performing an algebraic operation on a set of variables. Instead, all the Examiner contends is that these privatizable storage object declarations encapsulate a global storage object. Such a global storage object however nowhere teaches or suggests either a reduction operation or performance of an algebraic operation.

As such, the Examiner seeks to combine Sundaresan with Poulsen. However, Sundaresan nowhere discusses program translation or any reason why its program would need to be translated in the manner taught by Poulsen. Simply put, there is no teaching or suggestion in the references in order to combine them to obtain the claimed subject matter. Rather, the Examiner has clearly engaged in improper hindsight-based reconstruction. *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1316-17 (Fed. Cir. 2000). In this regard, the Examiner merely states that it would have been obvious to combine the references "for the purpose of improving the

expressibility and maintainability of the parallel computer program." Final Office Action, p. 5. Such improvement is merely the purported advantage of Sundaresan, and is not any valid motivation to combine Sundaresan and Poulsen. *In re Lee*, 61 U.S.P.Q. 2d 1430, 1435 (Fed. Cir. 2001).

Nowhere can the Examiner point to any disclosure in either of Poulsen or Sundaresan that teaches or suggests the desirability of modifying Poulsen such that its thread privatizable storage objects are somehow transformed into reduction operations. This is especially so, as Poulsen nowhere teaches the use or desirability of reduction operations. Instead, Poulsen is directed to transformation of a program such that multiple threads can access global storage objects in a privatized manner. Poulsen, col. 4, ln. 62-col. 5, ln. 6. Further, Sundaresan nowhere teaches or suggests that its parallel program be modified for use with such privatizable storage objects. As such, the modification proposed by the Examiner would change the principle of operation of Poulsen, running afoul of the MPEP's proscription against such a modification. MPEP §2143.01.

Accordingly, for at least these reasons, the rejection of claim 1 and claims 3, 6-7, 21 and 23 depending therefrom is clearly erroneous. For at least the same reasons, the rejection of claims 8, 10-14 and 26 and claims 15, 18 and 20 is also clearly erroneous.
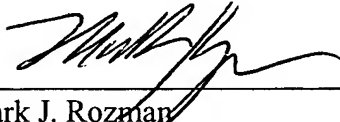
For at least the same reasons discussed above, the rejection of claims 22, 24 and 25 under §103(a) over Poulsen in view of Sundaresan and further in view of U.S. Patent No. 6,212,617 (Hardwick) is also clearly erroneous. That is, as described above, there is no motivation to combine Sundaresan with Poulsen. Even less motivation exists for the combination with Hardwick. In this regard, Hardwick is directed to reducing inter-processor communications during parallel processing. However, Hardwick is nowhere concerned with program translation, such as that of Poulsen. Nor is there any teaching or suggestion that would motivate one interested in performing program translations to implement the reduced inter-processor communications of Hardwick. Furthermore, Hardwick nowhere teaches or suggests performing vector reduction operations via an N-dimension loop. For these further reasons, the rejection of pending claims 22, 24 and 25 is clearly erroneous.

Since these rejections are clearly violative of existing PTO policy, the need for an appeal should be avoided.

Respectfully submitted,

Date: 7/24/06

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